WASHINGTON STATE BUILDING CODE

CHAPTERS 51-56 and 51-57 WAC

UNIFORM PLUMBING CODE and UNIFORM PLUMBING CODE STANDARDS

2006 Edition



Washington State Building Code Council

Effective July 1, 2007

Copies of the State Building Codes may be obtained from:

Washington Association of Building Officials
Post Office Box 7310
Olympia, Washington 98507-7310
(888) 664-9515 www.wabo.org/bookstore.htm

Complete copies of the 2006 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials may be obtained from:

International Association of Plumbing and Mechanical Officials (800) 85-IAPMO (854-2766) Fax 877 85-CODES http://publications.iapmo.org/

Third Edition Titled Uniform Plumbing Code Chapters 51-56/51-57 WAC Effective July 1, 2007 Printed March 2007

Third Edition based on WSR 07-01-094

Preface

Authority: The Uniform Plumbing Code (Chapters 51-56 and 51-77 WAC) is adopted by the Washington State Building Code Council pursuant to Chapters 19.27 and 70.92 RCW. This code was first adopted by reference by the Washington State Legislature in 1974. In 1985, the Legislature delegated the responsibility of adoption and amendment of these codes to the State Building Code Council.

Supersession of Previous Codes: Chapters 51-56 and 51-57 WAC supersede Chapters 51-46 and 51-47 WAC.

Code Precedence: The State Building Code Act, Chapter 19.27 RCW, establishes the following order of precedence among the documents adopted as parts of the State Building Code:

International Building Code, Standards and amendments – WAC 51-50; International Residential Code, Standards and amendments – WAC 51-51; International Mechanical Code, Standards and amendments – WAC 51-52; International Fire Code, Standards and amendments – WAC 51-54; Uniform Plumbing Code, Standards and amendments – WAC 51-56, 51-57.

Where there is a conflict between codes, an earlier named code takes precedence over a later named code. In the case of conflict between the duct insulation requirements of the International Mechanical Code and the duct insulation requirements of the Energy Code, the Energy Code, or where applicable, a local jurisdiction's energy code, shall govern.

Where, in any specific case, different sections of this Code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

Organization and Numbering: These rules are written to allow compatible use with the Uniform Plumbing Code. All sections which are amended, deleted, or added are referenced.

Enforcement: The State Building Code Act requires that each local jurisdiction enforce the State Building Code within its jurisdiction. Any jurisdiction can contract with another jurisdiction or an inspection agency to provide the mandated enforcement activities.

Amendments to the State Building Code:

The State Building Code Council has adopted review procedures and approval criteria for local amendments. These procedures and criteria are found in Chapter 51-04 WAC. The Council has exempted from its review any amendments to the administrative provisions of the various codes.

Forms for proposing statewide amendments to the State Building Code are available from the State Building Code Council staff.

A. **Amendments of Statewide Application**: On a yearly basis the State Building Code Council will consider proposals to amend the State Building Code. The Council is not scheduled to enter formal rulemaking until 2009 as part of its consideration of adoption of the 2009 series of codes.

Proposals to amend the State Building Code shall be made on forms provided by the Building Code Council.

Code Change Proposal Submittal Deadline: March 1st of each year.

B. **Local Amendments**: Any jurisdiction may amend the State Building Code provided the amendments do not reduce the minimum performance standards of the codes. There are two areas where local amendments are limited or prohibited:

Prohibited Amendments: Residential provisions of the State Energy Code (WAC 51-11), the Ventilation and Indoor Air Quality Code (WAC 51-13); any provision of the International Building Code or International Residential Code affecting accessibility; and standards specifically adopted in Chapters 19.27 and 19.27A WAC cannot be amended by any local jurisdiction.

Residential Amendments: Amendments by local jurisdictions which affect the construction of single family and multi-family residential buildings must be reviewed and approved by the State Building Code Council before such amendments can be enforced. The State Building Code Act provides the following definition:

Multi-family residential building: means common wall residential buildings that consist of four or fewer units, that do not exceed two stories in height, that are less than 5,000 square feet in area, and that have a one-hour fire-resistive occupancy separation between units.

Application forms for Council review of local amendments are available from the State Building Code Council Staff.

Washington State Building Code Council
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Printing Format: This version of the rules is published as a series of insert or replacement pages. Each page provides instructions for installing them in the model code book. Amendments to the model code which are new or revised from the previous edition of this code are indicated by a line in the margin next to the revised portions.

Effective Date: These rules were adopted by the State Building Code Council on November 17, 2006. The rules are effective throughout the state on July 1, 2007. (This version of the code is based on WAC 51-56 and 51-57 as published in WSR 07-01-094. It is subject to review by the State Legislature during the 2007 session.)

Building Permit Fees: The activities of the State Building Code Council are supported by permit fees collected by each city and county. Section 19.27.085 of the State Building Code Act requires that a fee of \$4.50 be imposed on each building permit issued by each city and county. In addition, a fee of \$2.00 per unit shall be imposed for each dwelling unit after the first unit, on each building containing more than one residential unit. For the purpose of this fee, WAC 365-110-035 defines building permits as any permit to construct, enlarge, alter, repair, move, improve, remove, convert or demolish any building or structure regulated by the Building Code. Exempt from the fee are plumbing, electrical, mechanical permits, permits issued to install a mobile/manufactured home, commercial coach or factory built structure, or permits issued pursuant to the International Fire Code.

Each city and county shall remit moneys collected to the state treasury quarterly. No remittance is required until a minimum of \$50.00 has accumulated.

These permit fees are the amounts current in January 2007. Such fees may be changed by the State Legislature.

Opinions: Only at the request of local enforcement officials, the State Building Code Council may issue interpretations/opinions of those provisions of the State Building Code created by the Council, or provisions of the model codes amended by the Council. Final interpretation authority for any specific permit resides with the local enforcement official.

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CHAPTER 51-56 WAC STATE BUILDING CODE ADOPTION AND AMENDMENT OF THE 2006 EDITION OF THE UNIFORM PLUMBING CODE

WAC 51-56-001 AUTHORITY.

These rules are adopted under the authority of Chapter 19.27 RCW.

WAC 51-56-002 PURPOSE.

The purpose of these rules is to implement the provisions of Chapter 19.27 RCW, which provides that the State Building Code Council shall maintain the State Building Code in a status which is consistent with the purpose as set forth in RCW 19.27.020. In maintaining the codes, the council shall regularly review updated versions of the codes adopted under the act, and other pertinent information, and shall amend the codes as deemed appropriate by the Council.

WAC 51-56-003 UNIFORM PLUMBING CODE.

The 2006 edition of the Uniform Plumbing Code, published by the International Association of Plumbing and Mechanical Officials, is hereby adopted by reference with the following additions, deletions and exceptions: PROVIDED that Chapters 12 and 15 of this code are not adopted. PROVIDED FURTHER, that those requirements of the Uniform Plumbing Code relating to venting and combustion air of fuel fired appliances as found in Chapter 5 and those portions of the Code addressing building sewers are not adopted.

WAC 51-56-007 EXCEPTIONS.

The exceptions and amendments to the model codes contained in the provisions of Chapter 19.27 RCW shall apply in cases of conflict with any of the provisions of these rules.

Codes referenced which are not adopted through RCW 19.27.031 or Chapter 19.27A RCW shall not apply unless specifically adopted by the authority having jurisdiction.

WAC 51-56-008 IMPLEMENTATION.

The Uniform Plumbing Code adopted by Chapter 51-56 WAC shall become effective in all counties and cities of this state on July 1, 2007, unless local government residential amendments have been approved by the State Building Code Council.

2006 Uniform Plumbing Code	
	101.4.1.4 Conflicts Between Codes. Delete
	paragraph.
(Insert Facing Page 1)	

2006 Uniform Plumbing Code	
	103.1.3 Certification. State rules and regulations concerning certification shall apply.

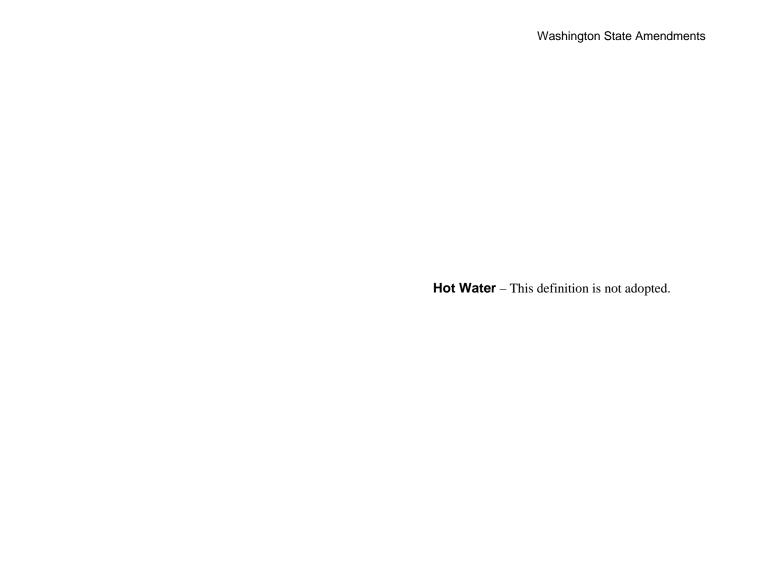
102.4 Appeals. All persons shall have the right to appeal a decision of the Authority Having Jurisdiction. The jurisdiction shall have a board of appeals to hear and rule on Plumbing Code appeals. Members of the board shall be appointed by the jurisdiction. Decisions by the board shall be reported to the jurisdiction and administered by the Authority Having Jurisdiction.

(Insert Facing Page 3)

Washington St	ate Amendments
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Certified Backflow Assembly Tester – A person certified by the Washington State Department of Health under Chapter 246-292 WAC to inspect (for correct installation and approval status) and test (for proper operation) approved backflow assemblies.

(Insert Facing Page 12)



Plumbing System – Includes all potable water building supply and distribution pipes, all plumbing fixtures and traps, all drainage and vent pipe(s), and all building drains including their respective joints and connections, devices, receptors, and appurtenances within the property lines of the premises and shall include potable water piping, potable water treating or using equipment, medical gas and medical vacuum systems, and water heaters: *Provided*, that no certification shall be required for the installation of a plumbing system within the property lines and outside a building.

301.1.3 Standards. Standards listed or referred to in this chapter or other chapters cover materials which will conform to the requirements of this Code, when used in accordance with the limitations imposed in this or other chapters thereof and their listing. Where a standard covers materials of various grades, weights, quality, or configurations, there may be only a portion of the listed standard which is applicable. Design and materials for special conditions or materials not provided for herein are allowed to be used by special permission of the Authority Having Jurisdiction after the Authority Having Jurisdiction has been satisfied as to their adequacy in accordance with Section 301.2.

(Insert Facing Page 21)

2006 Uniform Plumbing Code	
	311.4 Except as hereinafter provided in Sections 908.0, 909.0, 910.0, and Appendix L, Section L 6.0, 7.0 and 8.0, no vent pipe shall be used as a soil or waste pipe, nor shall any soil or waste pipe be used as a vent.
	no vent pipe shall be used as a soil or waste pipe, nor shall
	any soil or waste pipe be used as a vent.
(Insert Facing Page 23)	

313.7 All pipes penetrating floor/ceiling assemblies and fire-resistance rated walls or partitions shall be protected in accordance with the requirements of the building code.

313.6 No water, soil, or waste pipe shall be installed or permitted outside of a building or in an exterior wall unless, where necessary, adequate provision is made to protect such pipe from freezing. All hot and cold water pipes installed outside the conditioned space shall be insulated to a minimum R-3.

(Insert Facing Page 24)

402.0 Water-Conserving Fixtures and Fittings.

402.1 The purpose of this Section shall be to implement water conservation performance standards in accordance with RCW 19.27.170.

402.2 Application. This Section shall apply to all new construction and all remodeling involving replacement of plumbing fixtures and fittings in all residential, hotel, motel, school, industrial, commercial use, or other occupancies determined by the council to use significant quantities of water. Plumbing fixtures, fittings and appurtenances shall conform to the standards specified in this Section and shall be provided with an adequate supply of potable water to flush and keep the fixtures in a clean and sanitary condition without danger of backflow or cross-connection.

402.3 Water Efficiency Standards.

402.3.1 Standards for Vitreous China Plumbing Fixtures.

402.3.1.1 The following standards shall be adopted as plumbing materials, performance standards, and labeling standards for water closets and urinals. Water closets and urinals shall meet either the ANSI/ASME standards or the CSA standard.

ANSI/ASME A112.19.2M-1998 Vitreous China Plumbing

Fixtures

ANSI/ASME A112.19.6-1995 Hydraulic Requirements

for Water Closets and

Urinals

CSA B45 CSA Standards on

Plumbing Fixtures

402.3.1.2 The maximum water use allowed in gallons per flush (gpf) or liters per flush (lpf) for any of the following water closets shall be the following:

Tank-type toilets
1.6 gpf/6.0 lpf
Flushometer-valve toilets
1.6 gpf/6.0 lpf
Flushometer-tank toilets
1.6 gpf/6.0 lpf
Electromechanical hydraulic toilets
1.6 gpf/6.0 lpf
1.6 gpf/6.0 lpf

Exceptions:

- (1) Water closets located in day care centers, intended for use by young children may have a maximum water use of 3.5 gallons per flush or 13.25 liters per flush.
- (2) Water closets with bed pan washers may have a maximum water use of 3.5 gallons per flush or 13.25 liters per flush.
- (3) Blow out bowls, as defined in ANSI/ASME A112.19.2M, Section 5.1.2.3 may have a maximum water use of 3.5 gallons per flush or 13.25 liters per flush.
- **402.3.1.3** The maximum water use allowed for any urinal shall be 1.0 gallons per flush or 3.78 liters per flush.
- **402.3.1.4** No urinal or water closet that operates on a continuous flow or continuous flush basis shall be permitted.

402.3.1.5 This section does not apply to fixtures installed before the effective date of this Section, that are removed and relocated to another room or area of the same building after the effective date of this Section.

402.3.2 Standards for Plumbing Fixture Fittings.

402.3.2.1 The following standards are adopted as plumbing material, performance requirements, and labeling standards for plumbing fixture fittings. Faucets, aerators, and shower heads shall meet either the ANSI/ASME standard or the CSA standard.

ANSI/ASME A112.18.1M-1996 Plumbing Fixture Fittings CSA B125 Plumbing Fittings

402.3.2.2 The maximum water use allowed for any shower head is 2.5 gallons per minute or 9.5 liters per minute.

Exception: Emergency use showers shall be exempt from the maximum water usage rates.

402.3.2.3 The maximum water use allowed in gallons per minute (gpm) or liters per minute (lpm) for any of the following faucets and replacement aerators is the following:

Lavatory faucets2.5 gpm/9.5 lpmKitchen faucets2.5 gpm/9.5 lpmReplacement aerators2.5 gpm/9.5 lpm

Public lavatory faucets other

than metering 0.5 gpm/1.9 lpm

402.4 Metering Valves. Lavatory faucets located in restrooms intended for use by the general public shall be equipped with a metering valve designed to close by spring or water pressure when left unattended (self-closing).

Exceptions:

- (1) Where designed and installed for use by persons with a disability.
- (2) Where installed in day care centers, for use primarily by children under 6 years of age.

402.5 Implementation.

402.5.1 The standards for water efficiency and labeling contained within Section 402.3 shall be in effect as of July 1, 1993, as provided in RCW 19.27.170 and amended July 1, 1998.

402.5.2 No individual, public or private corporation, firm, political subdivision, government agency, or other legal entity, may, for purposes of use in the state of Washington, distribute, sell, offer for sale, import, install, or approve for installation any plumbing fixtures or fittings unless the fixtures or fittings meet the standards as provided for in this Section.

Section 402.6 is not adopted.

2006	Uniform	Plumbing	Code

- **411.2 Location of Floor Drains.** Floor drains shall be installed in the following areas:
 - **411.2.1** Toilet rooms containing two (2) or more water closets or a combination of one (1) water closet and one (1) urinal, except in a dwelling unit. The floor shall slope toward the floor drains.
 - **411.2.2** Laundry rooms in commercial buildings and common laundry facilities in multi-family dwelling buildings.

(Insert Facing Page 31)

412.0 Minimum Number of Required Fixtures. For minimum number of plumbing fixtures required, see Building Code Chapter 29 and Table 2902.1.

Sections 412.1 through 412.7 and Table 4-1 are not adopted.

501.0 General. The regulations of this chapter shall govern the construction, location, and installation of fuel burning and other water heaters heating potable water. The minimum capacity for water heaters shall be in accordance with the first hour rating listed in Table 5-1. See the Mechanical Code for combustion air and installation of all vents and their connectors. All design, construction, and workmanship shall be in conformity with accepted engineering practices, manufacturer's installation instructions, and applicable standards and shall be of such character as to secure the results sought to be obtained by this Code. No water heater shall be hereinafter installed which does not comply in all respects with the type and model of each size thereof approved by the Authority Having Jurisdiction. A list of accepted gas equipment standards is included in Table 14-1.

502.0 Definitions

502.2 Chimney – Delete definition

502.3 Chimney, Factory-Built – Delete definition

502.4 Chimney, Masonry – Delete definition

502.5 Chimney, Metal – Delete definition

502.7 Direct Vent Appliance – Delete definition

502.8 Flue Collar – Delete definition

502.9 Gas Vent, Type B – Delete definition

502.10 Gas Vent, Type L – Delete definition

502.12 Vent – Delete definition

502.13 Vent Connector – Delete definition

TABLE 5-1^{1,3}

Number of Bathrooms	1 to 1.5		2 to 2.5			3 to 3.5					
Number of Bedrooms	1	2	3	2	3	4	5	3	4	5	6
First Hour Rating ² , Gallons	42	54	54	54	67	67	80	67	80	80	80

Notes:

¹The first hour rating is found on the "Energy Guide" label.

²Non-storage and solar water heaters shall be sized to meet the appropriate first hour rating as shown in the table.

³For replacement water heaters, see Section 101.4.1.1.1.

(Insert Facing Page 39)

Effective July 1, 2007

504.1 Inspection of Chimneys and Vents. Delete Paragraph.

505.1 Location. Water heater installation in bedrooms and bathrooms shall comply with one of the following:

- (1) Fuel-burning water heaters may be installed in a closet located in the bedroom or bathroom provided the closet is equipped with a listed, gasketed door assembly and a listed self-closing device. The self-closing door assembly shall meet the requirements of Section 505.1.1. The door assembly shall be installed with a threshold and bottom door seal and shall meet the requirements of Section 505.1.2. All combustion air for such installations shall be obtained from the outdoors in accordance with the International Mechanical Code. The closet shall be for the exclusive use of the water heater.
 - (2) Water heater shall be of the direct vent type.

(Insert Facing Page 40)

507.0 Combustion Air. For issues relating to combustion air, see the Mechanical Code.

Delete remainder of Section 507.

506.2 All storage-type water heaters deriving heat from fuels or types of energy other than gas, shall be provided with, in addition to the primary temperature controls, an over-temperature safety protection device constructed, listed, and installed in accordance with nationally recognized applicable standards for such devices and a combination temperature and pressure relief valve.

	Washington State Amendments
Sections 508.6 through 508.9 are not adopted.	
	(Insert Facing Page 44)
	
Effective July 1, 2007	

2006 Uniform Plumbing Code	
508.12 Building Structural Members. This section is	
not adopted.	
	508.18 Venting of Flue Gases. This section is not
	adopted.
(Insert Facing Page 45)	
	Effective July 1, 2007

Sections 508.20 through 508.24.5 are not adopted.



511.0 Sizing of Category I Venting Systems. Delete entire section.

(Insert Facing Page 63)

2006 Uniform Plumbing Code		
	512.0 Direct Vent Equipment.	Delete entire Section.
	The remainder of Chapter 5 is	not adopted
(Insert Facing Page 67)		
(Insert Facing Page 67)		
		Effective July 1 2007

603.0 Cross-Connection Control. Cross-connection control shall be provided in accordance with the provisions of this chapter. Devices or assemblies for protection of the public water system must be models approved by the Department of Health under WAC 246-290-490. The Authority Having Jurisdiction shall coordinate with the local water purveyor where applicable in all matters concerning cross-connection control within the property lines of the premises.

No person shall install any water operated equipment or mechanism, or use any water treating chemical or substance, if it is found that such equipment, mechanism, chemical or substance may cause pollution or contamination of the domestic water supply. Such equipment or mechanism may be permitted only when equipped with an approved backflow prevention device or assembly.

603.1 Approval of Devices or Assemblies. Before any device or assembly is installed for the prevention of backflow, it shall have first been approved by the authority having jurisdiction. Devices or assemblies shall be tested for conformity with recognized standards or other standards acceptable to the authority having jurisdiction that are consistent with the intent of this code.

All devices or assemblies installed in a potable water supply system for protection against backflow shall be maintained in good working condition by the person or persons having control of such devices or assemblies. Such devices or assemblies shall be tested in accordance with Section 603.3.3 and WAC 246-290-490. If found to be defective or inoperative, the device or assembly shall be replaced or repaired. No device or assembly shall be removed from use or relocated or other device or assembly substituted, without the approval of the authority having jurisdiction.

Testing shall be performed by a Washington State Department of Health certified backflow assembly tester.

603.3.3 For devices and assemblies other than those regulated by the Washington State Department of Health in conjunction with the local water purveyor for the protection of public water systems, the Authority Having Jurisdiction shall ensure that the premise owner or responsible person shall have the backflow prevention assembly tested by a Washington State Department of Health certified backflow assembly tester:

- (1) At the time of installation, repair, or relocation; and
- (2) At least on an annual schedule thereafter, unless more frequent testing is required by the Authority Having Jurisdiction.

(Insert Facing Page 98)

603.4.6.1 Potable water supplies to systems having no pumps or connections for pumping equipment, and no chemical injection or provisions for chemical injection, shall be protected from backflow by one of the following devices:

- (1) Atmospheric vacuum breaker
- (2) Pressure vacuum breaker
- (3) Spill-resistant pressure vacuum breaker
- (4) Reduced pressure backflow preventer
- (5) A double check valve may be allowed when approved by the water purveyor and the Authority Having Jurisdiction.

603.4.10 Potable water make up connections to steam or hot water boilers shall be protected by an air gap or reduced pressure principle backflow preventer.

(Insert Facing Page 99)

603.4.12 Potable water supply to carbonators shall be protected by a listed reduced pressure principle backflow preventer as approved by the Authority Having Jurisdiction for the specific use.

603.4.14 Backflow preventers shall not be located in any area containing fumes or aerosols that are toxic, poisonous, infectious, or corrosive.

603.4.16.1 Except as provided under Sections 603.4.16.2 and 603.4.16.3, potable water supplies to fire protection systems that are normally under pressure, including but not limited to standpipes and automatic sprinkler systems, except in one or two family residential flow-through or combination sprinkler systems piped in materials approved for potable water distribution systems, shall be protected from back-pressure and back-siphonage by one of the following testable devices:

- (1) Double check valve assembly
- (2) Double check detector assembly
- (3) Reduced pressure backflow preventer
- (4) Reduced pressure detector assembly

Potable water supplies to fire protection systems that are not normally under pressure shall be protected from backflow and shall meet the requirements of the appropriate standard(s) referenced in Table 14-1.

(Insert Facing Page 100)

603.4.23 Potable Water Supply to Swimming Pools, Spas and Hot Tubs shall be protected by an airgap or a reduced pressure principle backflow preventer when:

- (1) The unit is equipped with a submerged fill line; or
- (2) The potable water supply is directly connected to the unit circulation system.

(Insert Facing Page 101)

604.15 Plastic water service piping may terminate within a building, provided the connection to the potable water distribution system shall be made as near as is practical to the point of entry and shall be accessible. Barbed insert fittings with hose clamps are prohibited as a transition fitting within the building.

(Insert Facing Page 102)

608.5 Relief valves located inside a building shall be provided with a drain, not smaller than the relief valve outlet, of galvanized steel, hard drawn copper piping and fittings, CPVC, or listed relief valve drain tube with fittings which will not reduce the internal bore of the pipe or tubing (straight lengths as opposed to coils) and shall extend from the valve to the outside of the building with the end of the pipe not more than two (2) feet (610 mm) nor less than six (6) inches (152 mm) above the ground or the flood level of the area receiving the discharge and pointing downward. Such drains may terminate at other approved locations. No part of such drain pipe shall be trapped or subject to freezing. The terminal end of the drain pipe shall not be threaded.

Exception: Replacement water heating equipment shall only be required to provide a drain pointing downward from the relief valve to extend between two feet (610 mm) and six inches (152 mm) from the floor. No additional floor drain need be provided.

610.4 Systems within the range of Table 6-5 may be sized from that table or by the method set forth in Section 610.5.

Listed parallel water distribution systems shall be installed in accordance with their listing.

(Insert Facing Page 106)

701.1.2 ABS and PVC DWV piping installations shall be installed in accordance with IS 5 and IS 9. Except for individual single family dwelling units, materials exposed within ducts or plenums shall have a flame-spread index of not more than 25 and a smoke-developed index of not more than 50, when tested in accordance with the Test for Surface-Burning Characteristics of the Building Materials (see the Building Code standards based on ASTM E-84 and ANSI/UL 723).

(Insert Facing Page 111)

2006 Uniform Plumbing Code	
	704.3 Except where specifically required to be connected indirectly to the drainage system, or when first approved by the authority having jurisdiction, all plumbing fixtures, drains, appurtenances, and appliances shall be directly connected to the drainage system of the building or premises.

2006 Uniform Plumbing Code	
710.3 The minimum size of any pump or any discharge pipe from a sump having a water closet connected thereto shall be not less than two (2) inches (52 mm).	
Sections 710.3.1 through 710.3.3 are not adopted.	
(Insert Facing Page 117)	

PART II — BUILDING SEWERS

Part II Building Sewers. Delete all of Part II, Sections 713 to 723, and Tables 7-7 and 7-8.

(Insert Facing Page 119)

903.1.2 ABS and PVC DWV piping installations shall be installed in accordance with IS 5 and IS 9. Except for individual single family dwelling units, materials exposed within ducts or plenums shall have a flame-spread index of not more than 25 and a smoke developed index of not more than 50, when tested in accordance with the Test for Surface-Burning Characteristics of the Building Materials (See the Building Code standards based on ASTM E-84 and ANSI/UL 723).

(Insert Facing Page 127)

908.4.1 Where permitted. Any combination of fixtures within one (1) or two (2) bathrooms located on the same floor level and serving dwelling units or sleeping units shall be permitted to be vented by a wet vent. The wet vent shall be considered the vent for the fixtures and shall extend from the connection of the dry vent along the direction of the flow in the drain pipe to the most downstream fixture drain connection to the horizontal branch drain. Only the fixtures within the bathroom(s) shall connect to the wetvented horizontal branch drain. Any additional fixtures shall discharge downstream of the wet vent system and be conventionally vented.

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1101.3 Material Uses. Rainwater piping placed within the interior of a building or run within a vent or shaft shall be of cast iron, galvanized steel, wrought iron, brass, copper, lead, Schedule 40 ABS DWV, Schedule 40 PVC DWV, or other approved materials, and changes in direction shall conform to the requirements of Section 706.0. ABS and PVC DWV piping installations shall be installed in accordance with IS 5 and IS 9. Except for individual single-family dwelling units, materials exposed within ducts or plenums shall have a flame-spread index of not more than 25 and a smoke-developed index of not more than 50, when tested in accordance with the Test for Surface Burning Characteristics of the Building Materials (see the Building Code standards based on ASTM E-84 and ANSI/UL 723).

1101.12.0 Cleanouts.

- **1101.12.1** Cleanouts for building storm drains shall comply with the requirements of this Section. Rain leaders and conductors connected to a building storm sewer shall have a cleanout installed at the base of the outside leader or outside conductor before it connects to the horizontal drain. Cleanouts shall be placed inside the building near the connection between the building drain and the building sewer or installed outside the building at the lower end of the building drain and extended to grade.
- **1101.12.2** Each cleanout shall be installed so that it opens to allow cleaning in the direction of flow of the soil or waste or at right angles thereto, and except in the case of wye branch and end-of-line cleanouts, shall be installed vertically above the flow line of the pipe.
- **1101.12.3** Cleanouts installed under concrete or asphalt paving shall be made accessible by yard boxes, or extending flush with paving with approved materials and be adequately protected.
- **1101.12.4** Approved manholes may be installed in lieu of cleanouts when first approved by the Authority Having Jurisdiction. The maximum distance between manholes shall not exceed three hundred (300) feet (91.4 m).

The inlet and outlet connections shall be made by the use of a flexible compression joint no closer than twelve (12) inches (305 mm) to, and not farther than three (3) feet (914 mm) from the manhole. No flexible compression joints shall be embedded in the manhole base.



1309.1 The provisions herein shall apply to the design, installation, testing and verification of medical gas, medical vacuum systems, and related permanent equipment in hospitals, clinics, and other health care facilities.

1309.2 The purpose of this chapter is to provide minimum requirements for the design, installation, testing and verification of medical gas, medical vacuum systems, and related permanent equipment, from the central supply system to the station outlets or inlets.

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1313.3 Minimum Station Outlets/Inlets. Station outlets and inlets for medical gas and medical vacuum systems shall be provided as listed in Chapter 246-320 WAC.		
(Insert Facing Page 205)		

1328.0 System Verification.

1328.1 Prior to any medical gas system being placed in service, each and every system shall be verified as described in Section 1328.2.

1328.1.1 Verification tests shall be performed only after all tests required in Section 1327.0, Installer Performed Tests, have been completed.

Testing shall be conducted by a party technically competent and experienced in the field of medical gas and vacuum pipeline testing and meeting the requirements of ANSI/ASSE Standard 6030, Medical Gas Verifiers Professional Qualifications Standard.

Testing shall be performed by a party other than the installing contractor or material vendor.

When systems have been installed by in-house personnel, testing shall be permitted by personnel of that organization who meet the requirements of this section.

CHAPTER 14 REFERENCED STANDARDS

Table 14-1 Standards for Materials, Equipment, Joints and Connections

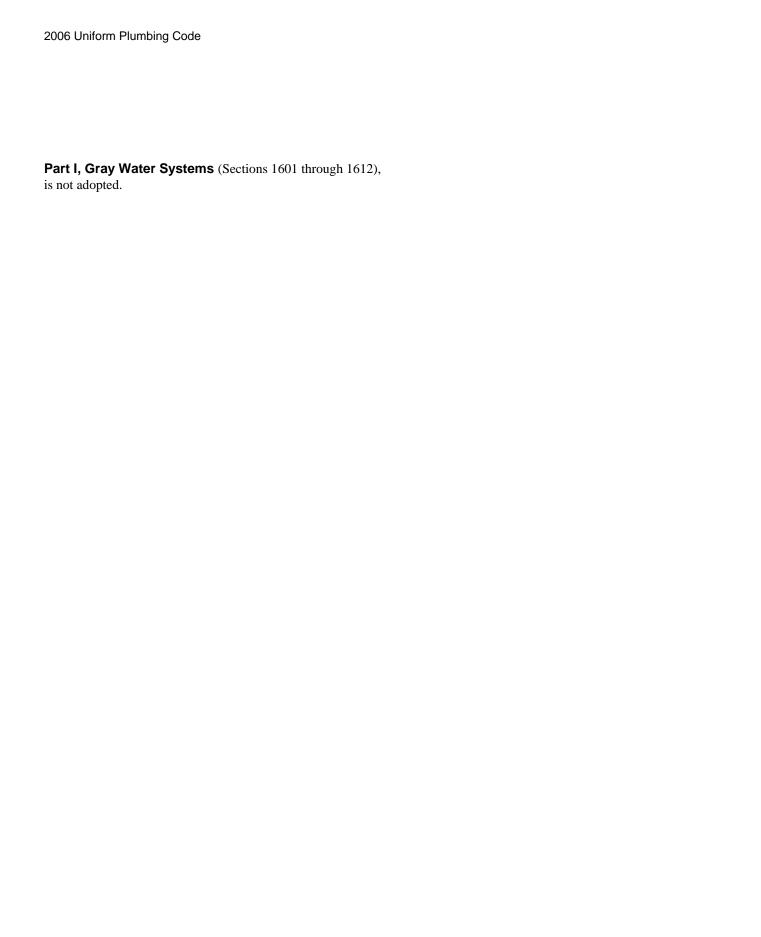
Where more than one standard has been listed for the same material or method, the relevant portions of all such standards shall apply.

(Remainder of page remains as printed)

Add the following standards to Table 14-1:

Standard Number	Standard Title	Application
NFPA 99-2005	Health Care Facilities	Piping
NFPA 99C-2205	Gas and Vacuum Systems	Piping
WAC 246-290-490	Washington State Department of Health Cross Connection Control Requirements	Backflow Protection

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WAC 51-57 State Building Code Amendment and Adoption of Appendix A, B and Appendix I of the 2006 Edition of the Uniform Plumbing Code

WAC 51-57-001 AUTHORITY.

These rules are adopted under the authority of Chapter 19.27 RCW.

WAC 51-57-002 PURPOSE.

The purpose of these rules is to implement the provisions of Chapter 19.27 RCW, which provides that the State Building Code Council shall maintain the State Building Code in a status which is consistent with the purpose as set forth in RCW 19.27.020. In maintaining the codes, the Council shall regularly review updated versions of the codes adopted under the act, and other pertinent information, and shall amend the codes as deemed appropriate by the Council.

WAC 51-57-003 UNIFORM PLUMBING CODE STANDARDS.

The 2006 Edition of the Uniform Plumbing Code Standards (Appendixes A, B and I), published by the International Association of Plumbing and Mechanical Officials is hereby adopted by reference.

WAC 51-57-004 CONFLICTS BETWEEN APPENDIX I AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

Where a conflict exists between the provisions of Appendix I and the manufacturer's installation instructions, the conditions of the listing and the manufacturer's installation instructions shall apply.

WAC 51-57-007 EXCEPTIONS.

The exceptions and amendments to the model codes contained in the provisions of Chapter 19.27 RCW shall apply in cases of conflict with any of the provisions of these rules.

WAC 51-57-008 IMPLEMENTATION.

The Uniform Plumbing Code Standards adopted by Chapter 19.27 RCW shall become effective in all counties and cities of this state on July 1, 2007, unless local government residential amendments have been approved by the State Building Code Council.

Washington St	ate Amendments
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2.6.1 Location. Polyethylene piping may terminate within a building or structure. The connection to the potable water distribution system shall be accessible, except that it may be buried underground outside of the building or structure in an accessible location. Barbed insert fittings with hose clamps are prohibited within a building.

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2.7.1 Location. PVC piping may terminate within a building or structure. The connection to the potable water distribution system shall be accessible, except that it may be buried underground outside of the building or structure in an accessible location.

2.1.2 Primer. Listed primers shall be used that are compatible with the type of listed CPVC cement and pipe used. The primer shall be a true solvent for CPVC, containing no slow drying ingredient. Cleaners shall not be allowed to be used as a substitute or equivalent for a listed primer.

Exception: Listed solvent cements that do not require the use of primer shall be permitted for use with CPVC pipe and fittings, manufactured in accordance with ASTM D2846 ($\frac{1}{2}$ in. -2 in. diameter).

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